

FLIGHT SUMMARY REPORT

Flight #: 90-077
Date: 11 April 1990
Sensor Package: Wild-Heerbrug RC-10
Area(s) Covered: White Sands, New Mexico

Investigator(s): Guenther, NASA-Goddard
Flight Request: 90D205

Aircraft #: 706
Julian Date: 101

SENSOR DATA

Accession #: 04016
Sensor ID #: 033
Sensor Type: RC-10
Focal Length: 6"
153.17 mm
Film Type: Panatomic-X
Aerographic
3400
Filtration: Wratten 12
Spectral Band: 510-700 nm
f Stop: 4
Shutter Speed: 1/125
of Frames: 85
% Overlap: 80
Quality: Excellent
Remarks:

Airborne Science and Applications Program

The Airborne Science and Applications Program (ASAP) is supported by three ER-2 high altitude Earth Resources Survey aircraft. These aircraft are operated by the High Altitude Missions Branch at NASA-Ames Research Center, Moffett Field, California. The ER-2s are used as readily deployable high altitude sensor platforms to collect remote sensing and *in situ* data on earth resources, celestial phenomena, atmospheric dynamics, and oceanic processes. Additionally, these aircraft are used for electronic sensor research and development and satellite investigative support.

The ER-2s are flown from various deployment sites in support of scientific research sponsored by NASA and other federal, state, university, and industry investigators. Data are collected from deployment sites in Kansas, Texas, Virginia, Florida, and Alaska. Cooperative international scientific projects have deployed the aircraft to sites in Great Britain, Australia, Chile, and Norway.

Photographic and digital imaging sensors are flown aboard the ER-2s in support of research objectives defined by the sponsoring investigators. High resolution mapping cameras and digital multispectral imaging sensors are utilized in a variety of configurations in the ER-2s' four pressurized experiment compartments.

Camera Systems

Various camera systems and films are used for photographic data collection. Film types include high definition color infrared, natural color, and black and white emulsions. Available photographic systems are as follows:

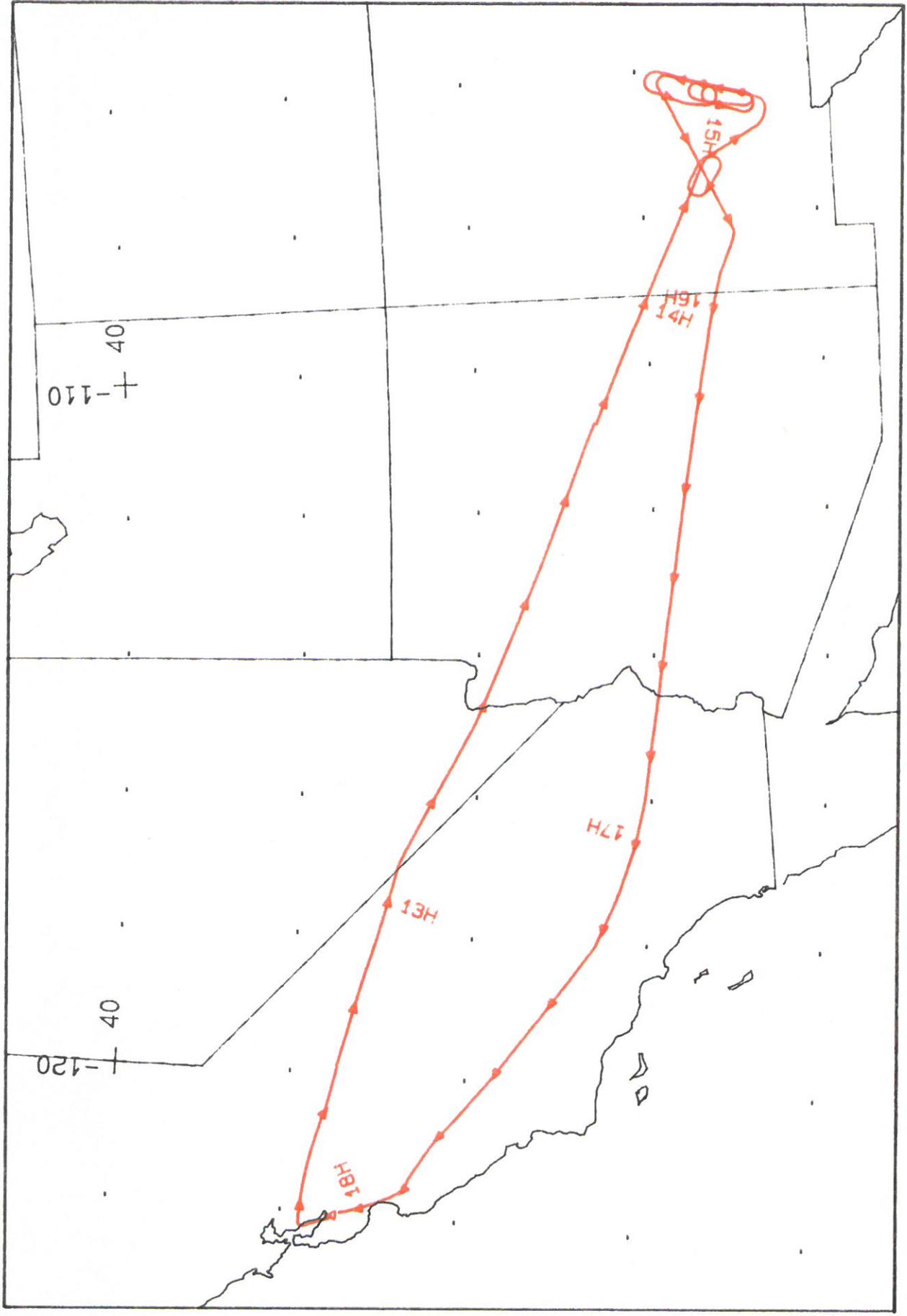
- Wild-Heerbrug RC-10 metric mapping camera
 - 9 x 9 inch film format
 - 6 inch focal length lens provides area coverage of 16 x 16 nautical miles from 65,000 feet
 - 12 inch focal length lens provides area coverage of 8 x 8 nautical miles from 65,000 feet
- Hycon HR-732 large scale mapping camera
 - 9 x 18 inch film format
 - 24 inch focal length lens provides area coverage of 4 x 8 nautical miles from 65,000 feet
- IRIS II Panoramic camera
 - 4.5 x 34.7 inch film format
 - 24 inch focal length lens
 - 90 degree field of view provides area coverage of 2 x 21.4 nautical miles from 65,000 feet

**CAMERA FLIGHT LINE DATA
FLIGHT NO. 90-077**

Accession # 04016

Sensor # 033

Check Points	Frame Numbers	Time (GMT-hr, min, sec)		Altitude, MSL feet/meters	Cloud Cover/Remarks
		START	END		
A - D	5253-5263	14:40:23	14:43:33	65000/19800	Clear
D - B	5264-5275	14:43:52	14:47:22	"	Clear; oblique (frames 5264-5265)
A - C	5276-5296	14:52:54	14:59:00	"	Clear
D - E	5297-5326	15:13:50	15:22:47	"	Clear
D - F	5327-5337	15:31:46	15:34:42	"	Clear



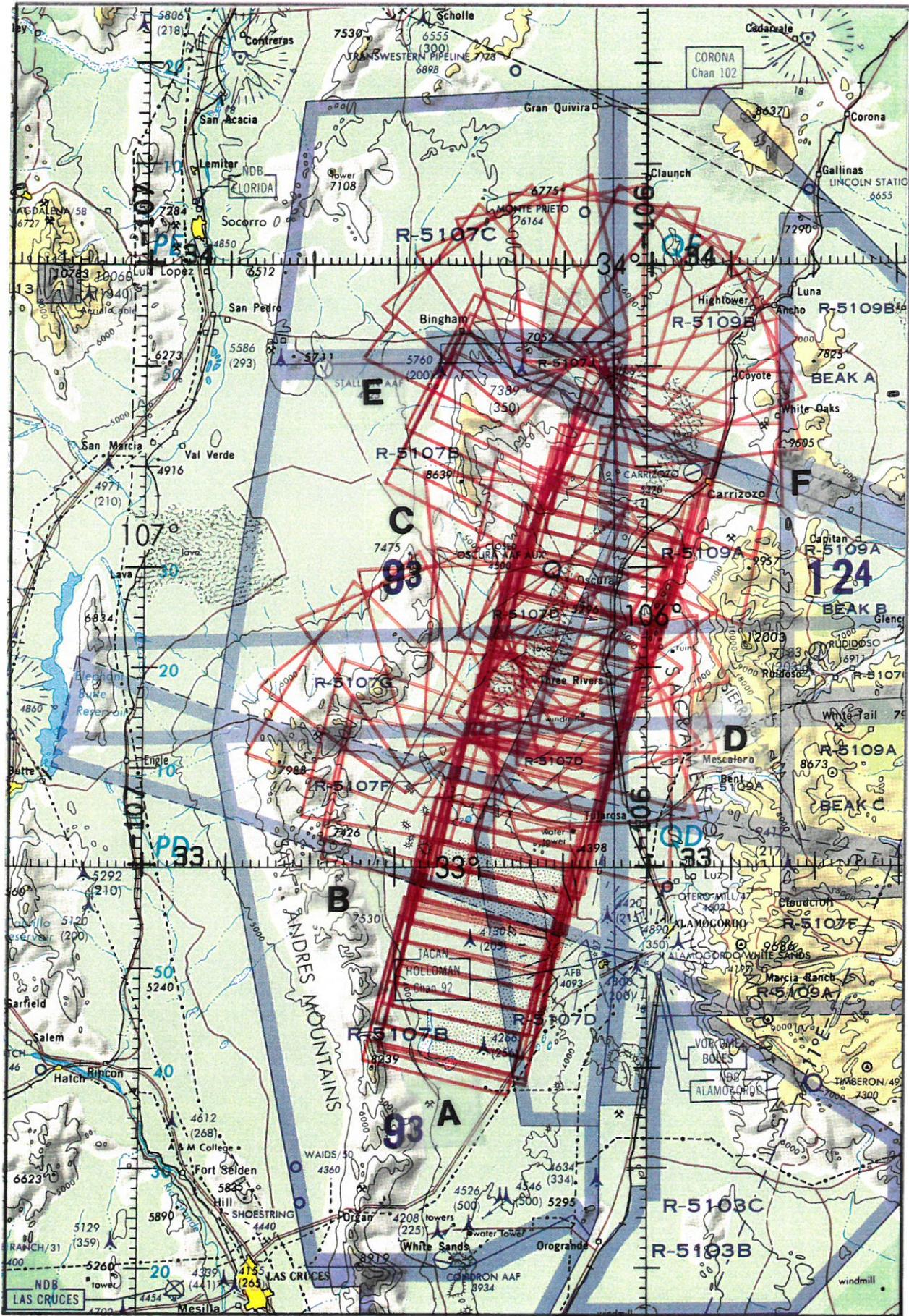
FLIGHT 90-077

10 April 1990

A/C 706

OCS / RC-10

White Sands, NM



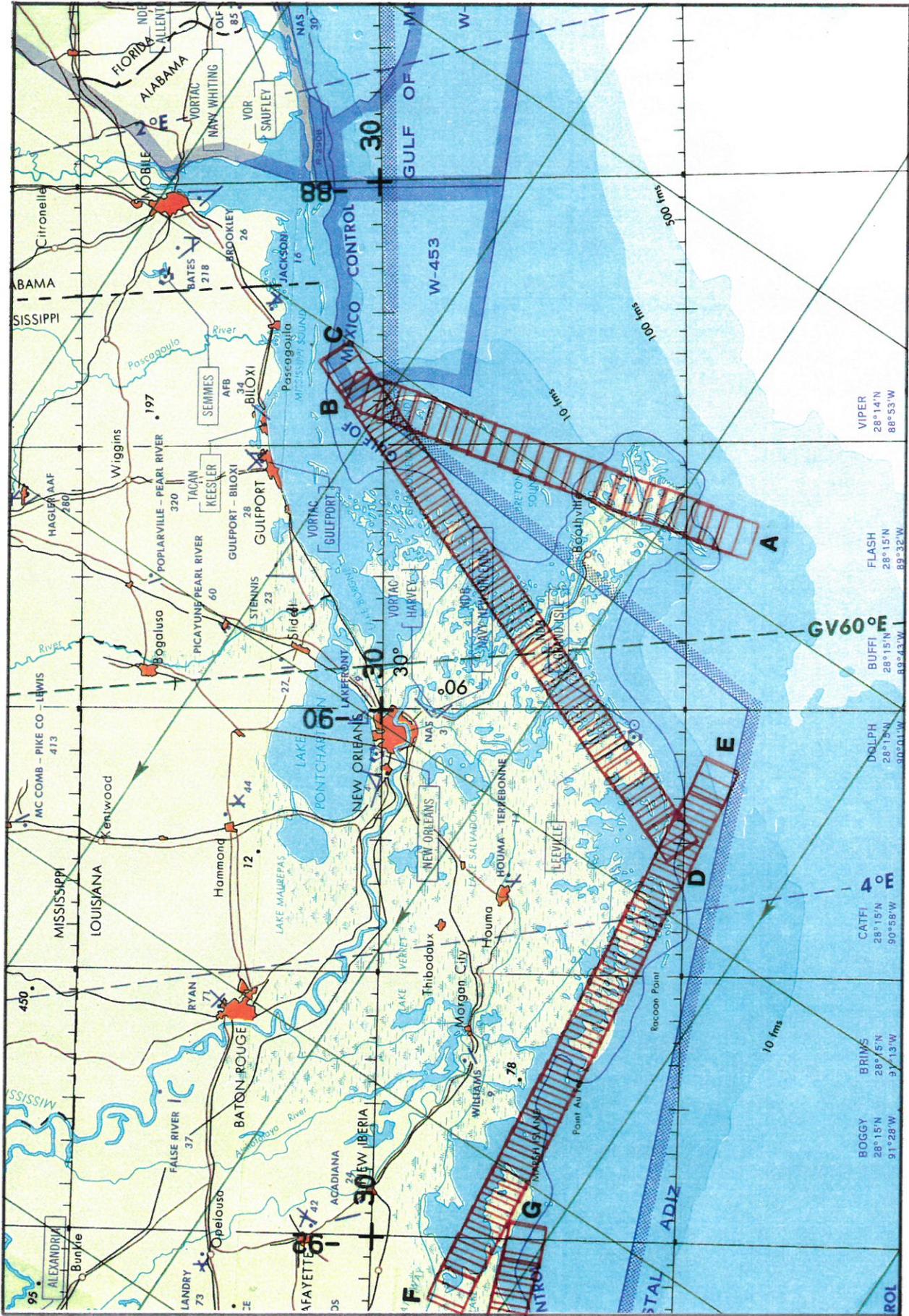
ONC 6-19

Accession # 04016

RC-10 / OCS

10 Apr 11 1990

FLIGHT 90-077



FLIGHT 90-079

16 April 1990

RC-10

Accession # 04022

Louisiana

JNC 44

